REPORT 2: IRANIAN NAVAL DEFENSES & ATTACK FORCES — SURVIVABILITY AGAINST U.S. STRIKE CAMPAIGN

Assessment Level: High Confidence (Post-2025 War Performance, Documented ORBAT, Doctrinal Adaptations)
Assumption: Iran has implemented all post-June 2025 doctrinal and structural adaptations (dispersed swarms, hardened coastal batteries, "missile farms," integrated A2/AD, and Chinese ISR augmentation).

EXECUTIVE SUMMARY

The Islamic Republic of Iran's naval forces are organized into two distinct branches with complementary roles:

1. **IRIN (Regular Navy):** Blue-water force focused on the Gulf of Oman, Arabian Sea, and Caspian. Operates frigates, submarines, and logistical assets for power projection and sustained operations.
2. **IRGCN (Revolutionary Guards Navy):** Asymmetric force focused on the Persian Gulf and Strait of Hormuz. Operates fast attack craft (FACs), anti-ship cruise missile (ASCM) batteries, naval mines, and swarm tactics designed to impose prohibitive costs on U.S. naval forces in confined waters.

Core Doctrine: Anti-Access/Area Denial (A2/AD). Iran does not seek to defeat the U.S. Navy in a traditional fleet engagement. Instead, it aims to:

- **Deny U.S. forces access to the Persian Gulf and Strait of Hormuz** through mines, ASCMs, and swarm attacks.
- **Impose unacceptable costs** (casualties, vessel damage, mission kill) that force the U.S. to withdraw or operate at stand-off ranges.
- **Hold U.S. regional bases (Al Udeid, Muwaffaq Salti) at risk** with ballistic missiles and drones.
- **Extend A2/AD into the Arabian Sea** using submarines, long-range ASBMs, and navalized ASCMs to threaten carrier strike groups (CSGs) beyond the Strait.

Bottom Line Up Front: A U.S. naval strike campaign against Iran would face a **layered, survivable, and increasingly long-range A2/AD network.** The confined waters of the Persian Gulf are a **kill zone** where U.S. surface vessels would be subjected to saturation attacks from multiple axes. Even in the Arabian Sea, the combination of Chinese ISR, submarines, and emerging ASBM/ASCM capabilities raises the risk profile for U.S. carriers. Iran's naval forces are designed to **survive the opening strikes** and retaliate with pre-positioned, dispersed, and hardened assets.

SECTION 1: THE ARCHITECTURE OF DENIAL — IRANIAN NAVAL FORCES

1.1 IRIN (Regular Navy) — Blue Water / Arabian Sea Focus

1.1.1 Surface Combatants

Class	Type	Number	Armament	Home Base	Role
Moudge-class (Jamaran, Damavand, Sahand, etc.)	Frigate (FFGH)	4-5	ASCM (Noor/Qader), SAM (Mersad/Standard), torpedoes, 76mm gun	Bandar Abbas (1st), Bushehr (2nd), Bandar Anzali (4th-Caspian)	Blue-water presence; limited air defense; harassment of U.S. vessels
Alvand-class (Vosper Mk5)	Frigate (FFG)	3 (71 Alvand, 72 Alborz, 73 Sabalan)	ASCM (Noor/Qader), 114mm gun, torpedoes	Bandar Abbas	Older, but modernized; symbolic presence
Bayandor-class	Corvette (FS)	2	Light guns, limited missiles	Bandar Abbas	Mostly symbolic
Hengam-class	Logistics ship	Multiple	Logistics, helicopter	Bandar Abbas	Support

Survivability Assessment: These vessels are **highly vulnerable** in a conventional engagement. They lack modern air defense and would be targeted early by U.S. carrier air or submarines. Their primary value is **not survival, but harassment and political signaling.** In wartime, they would likely be dispersed to coastal hide sites or used as decoys.

1.1.2 Subsurface — The Silent Threat

Class	Type	Number	Armament	Base	Role
Kilo-class (Tareq)	SSK	3	Torpedoes, mines, ASCM (through tubes)	Bandar Abbas	Blue-water ambush; capable of threatening CSGs in Arabian Sea
Fateh-class	Light SS	2-4	Torpedoes, mines, ASCM?	Bandar Abbas	Indigenous; larger than Ghadir; coastal/intermediate
Ghadir-class	Midget SS	~20-30	Torpedoes, mines, swimmer delivery	Bandar Abbas, offshore	**Silent, hard to detect**; ideal for Strait ambush

Survivability Assessment: Submarines are Iran's most survivable naval assets. The **Ghadir-class** midget submarines are exceptionally quiet in shallow waters and can lie dormant on the seabed for extended periods. U.S. ASW forces would struggle to detect and neutralize them all before they execute ambushes. **Kilo-class** boats can operate in the Arabian Sea, threatening CSGs with torpedo attacks or ASCM launches.

1.1.3 Naval Aviation

Asset	Type	Number	Base	Role
SH-3D Sea King	ASW helicopter	~10	Bandar Abbas, Bushehr	Limited ASW
RH-53D Sea Stallion	Mine countermeasures?	~5	Bandar Abbas	Limited

Assessment: Minimal threat.

1.2 IRGCN — The Asymmetric Hammer

1.2.1 Coastal Defense — ASCM Batteries

System	Range	Warhead	Guidance	Number of Batteries	Mobility	Locations
Ghadir ASCM	300 km	200 kg HE	INS, ARH	~10-15	TEL-based, mobile	Strait of Hormuz, coastal cliffs, islands
Qader ASCM	300 km	200 kg HE	INS, ARH	~10-15	TEL-based, mobile	Strait of Hormuz, coastal cliffs, islands
Noor ASCM	120-200 km	165 kg HE	INS, ARH	~20-30	TEL-based, mobile	Coastal batteries, islands (Abu Musa, Lavan, etc.)
Khalij Fars ASBM	300 km	500 kg HE	EO seeker	~Unknown	TEL-based, mobile	Coastal
HY-2 (Kuhestak)	100 km	500 kg HE	INS, ARH	1 (inactive?)	Hardened, underground	Mouth of Persian Gulf; may be reactivated

Survivability Assessment: These batteries are **highly mobile** and designed for **shoot-and-scoot** tactics. They can be emplaced in caves, under bridges, or in civilian structures. U.S. air power would need to find and fix each battery before it fires—a near-impossible task given the mountainous coastline and pre-surveyed launch points.

1.2.2 Surface Attack Craft — The Swarm

Class	Type	Number	Armament	Bases	Role
Shahid Soleimani-class	Corvette (ASCM-armed)	3-5 (increasing)	ASCM (Noor/Qader), CIWS, possibly SAM	Bandar Abbas, Jask	Swarm command; fast, stealthy
Houdong-class (P313-xx)	Missile boat	~10	ASCM (C-802/Noor)	Bandar Abbas, islands	Missile-armed swarm
Kaman-class	FAC	~10-15	ASCM (Noor), torpedoes	Bandar Abbas, islands	Missile-armed swarm
C-14	Hovercraft FAC	~5-10	ASCM	Bandar Abbas	Very fast; missile-armed
Tir-class (IPS-18)	Fast Attack Craft	~50+	DShK, ATGM, possibly small ASCM	Coastal coves	Swarm, ambush
Paykaap-class (IPS-16)	Fast Attack Craft	~50+	DShK, ATGM, possibly small ASCM	Coastal coves	Swarm, older
Ashura-class	Speedboats	Hundreds	Machine guns, rockets, IEDs	Coastal coves	Human-wave swarm; martyrdom operations
Bladerunner 51	Super-fast boat	Limited	Unknown (likely ASCM)	Unknown	65 knots; high-speed raid

Survivability Assessment: The swarm is Iran's most **dispersed and survivable** naval asset. Hundreds of small craft are hidden in coves, under bridges, and among civilian vessels. They can be sortied on short notice to conduct **saturation attacks** against U.S. naval formations in the confined waters of the Persian Gulf. U.S. air power cannot target them all before they launch.

1.2.3 Naval Mines — The Silent Barrier

Type	Estimated Inventory	Deployment Platforms	Laying Speed	Sweeping Difficulty
Moored contact mines	Thousands	Ships, subs, small boats	Hours to days	Moderate
Bottom influence mines	Hundreds	Subs, specialized craft	Days	**Very High** (hard to detect/sweep)
Remote-controlled mines	Unknown	Coastal installations	Instant (activated)	**Extreme** (can be turned on/off)

Survivability Assessment: Mines are **pre-positioned** and **passive.** They require no active emission and cannot be targeted by air power once laid. Iran has likely pre-surveyed minefields in the Strait of Hormuz and can rapidly close the waterway. U.S. minesweeping operations would take **days to weeks** under threat of ASCM and drone attack.

SECTION 2: WHAT THE U.S. MUST DO — NAVAL STRIKE CAMPAIGN OBJECTIVES

2.1 U.S. Strategic Objectives in the Naval Domain

1. **Ensure Freedom of Navigation** through the Strait of Hormuz and Persian Gulf.
2. **Protect Carrier Strike Groups (CSGs)** from Iranian A2/AD threats.
3. **Neutralize Iranian Coastal Defense Batteries** (ASCM, ASBM) to enable carrier air operations.
4. **Clear Naval Mines** from shipping lanes.
5. **Suppress IRGCN Swarm Craft** to prevent harassment of U.S. vessels.
6. **Destroy or Bottle Up Iranian Submarines** to protect CSGs and logistics.

2.2 U.S. Force Posture (From Provided Charts)

Asset	Quantity	Role	Location
Carrier Strike Groups (CSG)	2 (USS Lincoln, USS Ford)	Air superiority, strike, ASW	Arabian Sea/Gulf of Oman
Aegis Destroyers (DDG)	15	Air defense, ASW, Tomahawk strike	Persian Gulf, Gulf of Oman
Cruiser (CG)	Likely 2 (embedded in CSGs)	Air defense command	With CSGs

Attack Submarines (SSN)	4 (2x CSG escort, USS South Dakota, USS Georgia)	ASW, Tomahawk strike, ISR	Indian Ocean, Gulf of Oman
SSGN (USS Georgia)	1 (154 Tomahawks)	Stealth Tomahawk strike	Underwater, Gulf of Oman
Maritime Patrol Aircraft (MPA)	P-8 Poseidon	ASW, ASuW surveillance	Regional bases
Aerial Refueling	KC-135/KC-46	Support carrier and land-based air	Orbits over Saudi Arabia, Iraq

2.3 U.S. Naval Strike Campaign Phases (Projected)

Phase	Timing	Actions	Iranian Counter
Phase 1: SEAD/DEAD (Naval Focus)	H-Hour to H+24	Tomahawk strikes on coastal ASCM/ASBM batteries, radar sites, IRGCN bases (Bandar Abbas, Jask, Bushehr, islands)	Mobile ASCM batteries vacate known sites; pre-surveyed alternate launch points used; mines already laid
Phase 2: MCM (Mine Countermeasures)	H+24 to H+72+	Minesweeping operations in Strait of Hormuz, escorted by Aegis destroyers	ASCM/ASBM attacks on MCM forces; drone swarms; FAC harassment
Phase 3: Swarm Suppression	Continuous	Carrier air strikes on FAC hide sites; armed reconnaissance over Persian Gulf	FACs disperse further; launch saturation attacks when U.S. ships enter kill box
Phase 4: Submarine Hunting	Continuous	P-8, SSN, surface ASW assets hunt Iranian subs in Arabian Sea	Subs go silent, lie in wait, attempt ambush

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SECTION 3: IRANIAN COUNTER-STRATEGIES — HOW THEY FIGHT

3.1 Defensive Survival — Pre-Conflict Posture

Asset	Pre-Conflict Posture	Rationale

ASCM Batteries	Dispersed to pre-surveyed hide sites; mobile TELs under bridges, in caves, among civilian structures	Avoid detection and targeting in opening strikes
FAC Swarm	Hidden in coastal coves, under mangrove cover, among civilian vessels	Survive to launch saturation attacks
Submarines (Ghadir)	Deployed to ambush positions in Strait, Gulf of Oman; lying silent on seabed	Undetectable; can be activated on command
Naval Mines	Pre-laid in strategic channels; remote-controlled mines "dormant"	Strait can be closed instantly
Shahid Soleimani-class	Dispersed to Jask, Chabahar, or hidden near Iranian coast	Survive to coordinate swarm attacks

3.2 Offensive Strikes — What Iran Must Hit

To survive and impose costs, Iran's naval forces must execute coordinated, multi-axis strikes on:

Priority Target 1: U.S. Carrier Strike Group (CSG)

Threat Axis	Assets	Timing	Objective
ASBM (Khalij Fars, Sejjil-ASBM)	Coastal batteries (Makran coast), mobile TELs	H+2 to H+6	Force CSG to maneuver defensively, disrupt flight operations, mission-kill a carrier
ASCM Saturation (Ghadir/Qader)	Coastal batteries, Shahid Soleimani-class, FACs	H+2 to H+12	Overwhelm Aegis defenses; hit escorts
Submarine Ambush (Kilo/Ghadir)	Pre-positioned in Gulf of Oman	H+12 to H+48	Torpedo or ASCM attack on CSG or logistics vessel
Drone Swarm (Shahed-136)	Coastal launch sites	H+2 to continuous	Saturation; divert defensive missiles

Technical Assessment:

- **Sinking a carrier is unlikely** but **mission-killing one is plausible.** A single ASBM hit on flight deck or propulsion would force withdrawal for repairs, a catastrophic political and operational blow.
- **Destroyer (DDG) loss is probable.** A coordinated ASCM saturation attack could overwhelm Aegis fire control channels, allowing one or more missiles to hit.

Priority Target 2: Al Udeid Air Base (Qatar)

Threat Axis	Assets	Timing	Objective
Ballistic Missile (Ghadr/Emad/Khyber)	Western Iran missile bases	H+3 to H+6	Destroy aircraft, crater runways, disrupt sortie generation
Cruise Missile (Soumar/Abu Mahdi)	Mobile TELs	H+3 to H+6	Penetrate defenses; hit hangars, C2 nodes
Drone Swarm	Coastal Iraq/Syria launch	H+6 to continuous	Overwhelm point defense; harass

Technical Assessment:

- Al Udeid hosts **bombers, tankers, and ISR aircraft.** Destroying even one B-1B or KC-135 on the ground is a major blow.
- Patriot batteries at Al Udeid went **mobile** (shoot-and-scoot) in early 2026, indicating U.S. expects this base to be a primary target. [Nahle Report]

Priority Target 3: Muwaffaq Salti Air Base (Jordan)

Threat Axis	Assets	Timing	Objective
Ballistic Missile (Zolfaghar/Fateh)	Western Iran, Iraqi PMF	H+3 to H+6	Destroy F-35As, A-10s, EA-18Gs
Cruise Missile	Mobile TELs	H+3 to H+6	Penetrate defenses
Drone Swarm	Iraqi PMF	H+6 to continuous	Overwhelm point defense

Technical Assessment:

- Muwaffaq Salti hosts **12 F-35As, 24 A-10s, and 6 EA-18G Growlers.** This is the **primary SEAD/DEAD base** for western axis strikes. Neutralizing it would severely degrade U.S. ability to suppress Iranian IADS in the opening days.

Priority Target 4: U.S. Bases in Iraq (Ain al-Assad, Erbil)

Threat Axis	Assets	Timing	Objective
Drone Swarm (Shahed-136)	Iraqi PMF (Kata'ib Hezbollah, etc.)	H+6 to continuous	Harass, divert U.S. air power
Short-Range Missiles (Fateh-110)	Iraqi PMF	H+6 to H+24	Destroy logistics, aircraft

Assessment: These bases are less critical but serve as **force multipliers** by diverting U.S. air assets from the main fight in Iran.

SECTION 4: SURVIVABILITY ASSESSMENT — SYSTEM BY SYSTEM

4.1 Coastal Defense ASCM Batteries

System	Survivability Against Opening U.S. Strikes	Rationale
Ghadir/Qader/Noor (Mobile TEL)	**High**	Mobile; shoot-and-scoot; pre-surveyed hide sites; U.S. cannot find and fix all before they fire
Khalij Fars ASBM (Mobile TEL)	**High**	Same as above
Kuhestak HY-2 Battery (Hardened)	**Moderate**	Fixed, but hardened underground; may survive if not directly hit; likely reactivated

Assessment: The opening Tomahawk barrage will destroy some batteries caught in the open or at known garrisons. However, the **majority will survive** to launch follow-on strikes. U.S. SEAD/DEAD against these mobile assets is a **continuous, attritional campaign**, not a one-time knockout.

4.2 IRGCN Swarm Craft

Class	Survivability	Rationale
Shahid Soleimani-class	**Moderate**	Larger, more detectable; but fast and stealthy; likely to survive if dispersed to Jask/Chabahar
Houdong/Kaman-class	**Moderate-High**	Small, fast, can hide in coves; some will be destroyed by air strikes, but many survive
Tir/Paykaap-class (FAC)	**High**	Hundreds of small craft hidden along coast; impossible to destroy all
Ashura-class (Speedboats)	**Very High**	Ubiquitous; can be launched from civilian areas; not targetable pre-conflict

Assessment: The swarm is **Iran's most survivable naval asset.** U.S. air power cannot destroy them all before they sortie. Once they launch, they become a **saturation threat** that Aegis destroyers must engage with limited missiles.

4.3 Submarines

Class	Survivability	Rationale
Ghadir-class (Midget)	**Very High**	Extremely quiet in shallow water; can lie dormant on seabed; U.S. ASW will miss many
Fateh-class	**High**	Larger but still quiet; difficult to detect in Gulf of Oman
Kilo-class	**Moderate**	Older, noisier; but can operate deep in Arabian Sea; U.S. SSNs will hunt them, but some may evade

Assessment: Submarines are **second-strike assets.** They will likely remain hidden during the opening phase, then emerge to ambush U.S. vessels after the initial chaos.

4.4 Naval Mines

Type	Survivability	Rationale
All Mines	**Very High**	Passive; cannot be targeted once laid; pre-laid fields exist

Assessment: Mines are **the ultimate survivors.** They require no emissions, no movement, no communication. The only way to neutralize them is **dangerous, time-consuming minesweeping operations** conducted under threat of ASCM attack.

SECTION 5: THE BATTLESPACE — WHERE AND HOW THE NAVAL WAR IS FOUGHT

5.1 The Persian Gulf — The Kill Zone

Characteristic	Implication	
Width at Strait of Hormuz	50 km (narrows to 34 km)	U.S. vessels are **always within range** of coastal ASCM batteries
Water Depth	Shallow (avg. 50m)	Limits submarine maneuver; favors midget subs (Ghadir) lying on bottom

Commercial Traffic	Heavy	Provides cover for FACs and mine laying; complicates targeting
Islands	Abu Musa, Tunbs, Qeshm, Kish, Lavan	Host Iranian ASCM batteries, radar, FAC bases; heavily fortified

Iranian Strategy: Saturate and Attrit. IRGCN will launch coordinated **swarm attacks** (FACs + ASCMs + drones) to overwhelm Aegis defenses. Mines will channel U.S. vessels into kill zones. Submarines will attempt torpedo ambushes on escorts or logistics ships.

U.S. Dilemma: To project power into the Gulf, the U.S. Navy must **enter the kill zone.** Even with two CSGs, the risk of losing a DDG or suffering a carrier mission kill is **significant and accepted only at the highest political levels.**

5.2 The Strait of Hormuz — The Chokepoint

Characteristic	Implication	
Shipping Lanes	Narrow, defined	Mines can be laid with precision; closure is instantaneous
Iranian Coastline	Mountainous, with coves	Ideal for concealed ASCM batteries and FAC hide sites
Islands	Abu Musa, Tunbs	Iranian military outposts; can deny passage

Iranian Strategy: Deny and Delay. Pre-laid minefields can close the Strait within hours. U.S. MCM forces must clear them under constant ASCM/drone attack, buying Iran time to execute other strikes.

U.S. Dilemma: Clearing the Strait is **essential for global oil markets** but requires **high-risk operations** that will likely result in casualties and vessel damage.

5.3 The Gulf of Oman / Arabian Sea — The Stand-Off Zone

Characteristic	Implication	
Distance from Iranian Coast	200-400 km	Beyond most coastal ASCM range, but within ASBM (Sejjil) and submarine range
Water Depth	Deep	Favors U.S. ASW and submarine operations; but also allows Kilo-class to hide
Chinese ISR Coverage	Persistent	U.S. CSG movements tracked in real-time

Iranian Strategy: Hold at Risk. Submarines (Kilo) and potentially ASBMs (Sejjil) threaten CSGs operating in the Arabian Sea. The goal is not to sink the carrier, but to **force it to operate at greater distance**, reducing sortie generation and increasing tanker dependency.

U.S. Dilemma: The CSG must operate close enough to launch strikes into Iran but far enough to avoid ASBM/submarine threats. This **operational box** is known to Iran and pre-targeted.

SECTION 6: WHAT SURVIVES — THE POST-OPENING NAVAL FORCE

After the opening 72 hours of U.S. naval strikes, the following Iranian naval capabilities are assessed to remain:

Capability	Surviving Force	Function
Coastal ASCM Batteries	60-70% of mobile TELs	Continue to threaten U.S. vessels in Persian Gulf and Strait
FAC Swarm	70-80% of small craft	Launch saturation attacks; harass MCM forces
Submarines (Ghadir)	80-90% (undetected)	Ambush U.S. vessels in Strait and Gulf of Oman
Submarines (Kilo/Fateh)	50-60% (some hunted)	Threaten CSGs in Arabian Sea
Naval Mines	100% (pre-laid)	Strait remains closed until swept
Shahid Soleimani-class	50-60%	Coordinate swarm attacks; fire ASCMs

Bottom Line: The U.S. Navy can **suppress but not eliminate** Iran's naval A2/AD network. The Persian Gulf remains a **contested environment** throughout the conflict. Mines remain a threat until swept. Submarines remain a threat until hunted. ASCM batteries continue to fire from new hide sites.

SECTION 7: IMPLICATIONS FOR THE U.S. CAMPAIGN

7.1 Cost of Naval Operations

Operation	Cost
Strait of Hormuz MCM	Weeks of operations; high risk to MCM vessels; likely casualties
Persian Gulf Patrols	Continuous threat of ASCM/swarm attack; defensive missile expenditure
CSG Operations in Arabian Sea	Risk of ASBM/submarine attack; reduced sortie generation
Tomahawk Expenditure	Hundreds of missiles on coastal defense; limited inventory

7.2 Operational Constraints

- **No Sanctuary for U.S. Bases:** Al Udeid and Muwaffaq Salti will be under continuous missile/drone attack, reducing sortie generation.
- **Tanker Vulnerability:** CSG-based air power requires tankers; tanker orbits are within range of Iranian long-range missiles.
- **Chinese ISR:** Every U.S. naval movement is tracked and reported to Iranian commanders, enabling timely counter-strikes.

7.3 What Iran Achieves by Surviving

A surviving naval A2/AD network enables Iran to:

1. **Deny U.S. Freedom of Navigation** in the Persian Gulf, impacting global oil markets and U.S. prestige.
2. **Impose Attrition** on U.S. naval forces, potentially sinking or mission-killing a DDG or even a carrier.
3. **Protect Retaliatory Missile Forces** by keeping U.S. naval air power at stand-off ranges.
4. **Maintain the Threat of Strait Closure** as a bargaining chip in ceasefire negotiations.

CONCLUSION

The Iranian naval A2/AD network in February 2026 is a **layered, survivable, and increasingly lethal** system designed to impose prohibitive costs on U.S. naval operations in the Persian Gulf and surrounding waters.

A U.S. naval strike campaign will achieve:

- **Suppression of fixed coastal defense sites** and known IRGCN bases.
- **Attrition of some mobile ASCM batteries** and FACs.

- **Temporary degradation of Iranian naval capabilities** in the opening hours.

It will **not** achieve:

- **Elimination of the mobile ASCM threat** (60-70% survive).
- **Neutralization of the FAC swarm** (70-80% survive).
- **Clearance of naval mines** (100% pre-laid).
- **Destruction of all submarines** (Ghadir-class remain undetected).
- **Prevention of Iranian missile and drone strikes** on U.S. regional bases.

The naval fight will be long, bloody, and inconclusive. Iran's forces are designed to survive the opening blow and impose costs over time. The U.S. Navy can win every engagement and still lose the campaign if it fails to secure its strategic objectives without incurring unacceptable losses.